

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Kimberly C. Gove Examiner #: 2286 Date: 1/18/2000  
 Alt. Unit: 100 Phone Number: 308-416116 Serial Number: 1001  
 Mail Box and Bldg/Room Location: 2019 2019 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the affected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or unity of the invention. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Perfluorinated chlorophenyl preparation of compound 100

Inventors (please provide full names): Kathleen Igo, Yasuyuki Suzuki, Katherine Igo

Earliest Priority Filing Date: 2/18/2000

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for compound of claim 8.

BEST AVAILABLE

Point of Contact:  
 Mona Smith  
 Technical Information Specialist  
 CM1 6A01  
 Tel: 308-3278

Thanks  
 [Signature]

## STAFF USE ONLY

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Date Search Requested	Patent	Patent Abstracts
Date Search Requested	Patent Family	Patent Abstracts
Date Search Requested	Other	Other (specify)

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FILE COVERS 1907 - 9 Apr 2003 VOL 138 ISS 15  
FILE LAST UPDATED: 8 Apr 2003 (20030408/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d stat que  
L12 1 SEA FILE=REGISTRY "CANDESARTAN CILEXETIL"/CN  
L13 ( 33)SEA FILE=HCAPLUS CYCLOHEXYLOXYCARBONYLOXY(W)ETHYL?  
L14 ( 32)SEA FILE=HCAPLUS ?ETHOXY?(L)TETRAZO?(L)BIPHENYL(L)METHYL(L)BENZ  
IMIDAZOLE?(L)CARBOXYL?  
L15 16 SEA FILE=HCAPLUS L13(L)L14  
L16 SEL L12 1- CHEM : 8 TERMS  
L17 437 SEA FILE=HCAPLUS L16  
L18 62 SEA FILE=HCAPLUS L17 AND (PREP? OR MANUF? OR SYNTHES?)  
L19 58097 SEA FILE=REGISTRY FATTY ACID?/CN OR CARBONIC(W)ACID? OR  
MYRISTAT? OR PALMIT? OR SEBAC?  
L20 802014 SEA FILE=HCAPLUS FATTY(W) ACID? OR CARBONIC(W)ACID? OR  
MYRISTAT? OR PALMIT? OR SEBAC? OR L19  
L21 10 SEA FILE=HCAPLUS L18 AND L20  
L23 11 SEA FILE=HCAPLUS L17 AND L20  
L24 11 SEA FILE=HCAPLUS L21 OR L23  
L25 10 SEA FILE=HCAPLUS L24 NOT L15

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L25 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2002:977687 HCAPLUS  
DOCUMENT NUMBER: 138:61310  
TITLE: Medicinal compositions containing drugs, drug  
absorption enhancers, and taurine compounds or  
polyamines  
INVENTOR(S): Kimura, Toshikiro; Higaki, Kazutaka; Miyake, Masateru;  
Minami, Takanori  
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 64 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1

Searched by M. Smith

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002102414	A1	20021227	WO 2002-JP5954	20020614
W: AU, CA, CN, KR, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
JP 2003063997	A2	20030305	JP 2002-174289	20020614
PRIORITY APPLN. INFO.:			JP 2001-180373	A 20010614
			JP 2001-298839	A 20010928

AB Disclosed are medicinal compns. contg. (1) a pharmacol. active substance, (2) a drug sorbefacient, and (3) a taurine compd. or a polyamine. A taurine compd. has an effect of lessening or preventing injuries on the intestinal mucosa. By adding the taurine compd. to medicinal compns. contg. a pharmacol. active substance and a drug sorbefacient, therefore, injuries on the intestinal mucosa due to the drug sorbefacient can be lessened or prevented. A polyamine has an effect of improving the absorbability of a pharmacol. active substance. By adding the polyamine to medicinal compns. contg. a pharmacol. active substance and a drug sorbefacient, therefore, the dose of the drug sorbefacient can be decreased and thus injuries on intestinal mucosa can be lessened or prevented. Powder compn. contg. polyvinyl alc. 3.3, mannitol 10, sodium lauryl sulfate 3, cilostazol 20, and taurine 3 g was **prepd.**

IT **145040-37-5**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (medicinal compns. contg. drugs, drug absorption enhancers, and taurine compds. or polyamines)

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:754995 HCAPLUS

DOCUMENT NUMBER: 137:268473

TITLE: Porous drug matrices and methods of  
**manufacture** thereofINVENTOR(S): Straub, Julie; Altreuter, David; Bernstein, Howard;  
Chickering, Donald E.; Khattak, Sarwat; Randall, Greg

PATENT ASSIGNEE(S): Acusphere Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U. S.  
6,395,300.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002142050	A1	20021003	US 2002-53929	20020122
US 6395300	B1	20020528	US 1999-433486	19991104
PRIORITY APPLN. INFO.:			US 1999-136323P	P 19990527
			US 1999-158659P	P 19991008
			US 1999-433486	A2 19991104

AB Drugs, esp. low aq. soly. drugs, are provided in a porous matrix form, preferably microparticles, which enhances dissoln. of the drug in aq. media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aq. soly., in a volatile solvent to form a drug soln., (ii) combining at least one pore

forming agent with the drug soln. to form an emulsion, suspension, or second soln. and hydrophilic or hydrophobic excipients that stabilize the drug and inhibit crystn., and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second soln. to yield the porous matrix of drug. Hydrophobic or hydrophilic excipients may be selected to stabilize the drug in cryst. form by inhibiting crystal growth or to stabilize the drug in amorphous form by preventing crystn. The pore forming agent can be either a volatile liq. that is immiscible with the drug solvent or a volatile solid compd., preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aq. medium and administered parenterally, or processed using std. techniques into tablets or capsules for oral administration. Thus, 5.46 g of PEG 8000, 0.545 g of prednisone, and 0.055 g of Span 40 were dissolved in 182 mL of methylene chloride. A soln. of 3.27 g of ammonium bicarbonate in 18.2 mL of water was added to the org. soln. (phase ratio 1:10) and homogenized for 5 min at 16,000 RPM. The resulting emulsion was spray dried on a benchtop spray dryer using an air-atomizing nozzle and nitrogen as the drying gas.

IT 1066-33-7, Ammonium bicarbonate 26266-57-9, Span 40

145040-37-5, Candesartan cilexetil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(porous drug matrixes and methods of manuf. thereof)

L25 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:556104 HCAPLUS

DOCUMENT NUMBER: 137:109489

TITLE: Compositions comprising a polypeptide and an active agent

INVENTOR(S): Piccariello, Thomas; Olon, Lawrence P.; Kirk, Randal J.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 34 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002099013	A1	20020725	US 2001-933708	20010822
PRIORITY APPLN. INFO.:			US 2000-247556P	P 20001114
			US 2000-247558P	P 20001114
			US 2000-247559P	P 20001114
			US 2000-247560P	P 20001114
			US 2000-247561P	P 20001114
			US 2000-247594P	P 20001114
			US 2000-247595P	P 20001114
			US 2000-247606P	P 20001114
			US 2000-247607P	P 20001114
			US 2000-247608P	P 20001114
			US 2000-247609P	P 20001114
			US 2000-247610P	P 20001114
			US 2000-247611P	P 20001114
			US 2000-247612P	P 20001114
			US 2000-247620P	P 20001114

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US 2000-247621P P 20001114  
 US 2000-247634P P 20001114  
 US 2000-247635P P 20001114  
 US 2000-247698P P 20001114  
 US 2000-247699P P 20001114  
 US 2000-247700P P 20001114  
 US 2000-247701P P 20001114  
 US 2000-247702P P 20001114  
 US 2000-247797P P 20001114  
 US 2000-247798P P 20001114  
 US 2000-247799P P 20001114  
 US 2000-247800P P 20001114  
 US 2000-247801P P 20001114  
 US 2000-247802P P 20001114  
 US 2000-247803P P 20001114  
 US 2000-247804P P 20001114  
 US 2000-247805P P 20001114  
 US 2000-247807P P 20001114  
 US 2000-247832P P 20001114  
 US 2000-247833P P 20001114  
 US 2000-247926P P 20001114  
 US 2000-247927P P 20001114  
 US 2000-247928P P 20001114  
 US 2000-247929P P 20001114  
 US 2000-247930P P 20001114

AB Claimed are compns. comprising a polypeptide and an active agent covalently attached to the polypeptide and a method for delivery of an active agent to a patient by administering the compn. to the patient. The peptide is a homopolymer of a naturally occurring amino acid or a heteropolymer of two or more naturally occurring amino acids. In an example, (Glu)n-cephalexin was **prepd.** from Glu(OBut)NCA and cephalixin hydrochloride.  
 IT **554-13-2**, Lithium Carbonate **145040-37-5**,  
**Candesartan cilexetil**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compns. comprising a polypeptide and an active agent)

L25 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:428695 HCAPLUS

DOCUMENT NUMBER: 136:406900

TITLE: Method for producing solid composition containing bioactive substance and polymers

INVENTOR(S): Ohmachi, Yoshihiro; Misaki, Masafumi; Takada, Shigeyuki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002043709	A1	20020606	WO 2001-JP10416	20011129
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,			

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002024124 A5 20020611 AU 2002-24124 20011129

JP 2002226365 A2 20020814 JP 2001-364095 20011129

PRIORITY APPLN. INFO.:

JP 2000-367183 A 20001201

WO 2001-JP10416 W 20011129

OTHER SOURCE(S): MARPAT 136:406900

AB Disclosed is a method for producing a compn. contg. a bioactive substance, characterized in that it comprises forming a solid contg. a bioactive substance and a polymer, and contacting the solid with a high pressure gas. The method allows the prodn. of a compn. which is suppressed in excessive initial release of the bioactive substance immediately after the administration thereof, is capable of releasing a predetd. amt. of the bioactive substance over a long period of time, and is extremely reduced in the deterioration of the bioactive substance and in the amt. of a residual org. solvent. An original freeze-dried microcapsule powder was **prepd.** from freeze-dried powder of recombinant human growth hormone, a soln. contg. dichloromethane, lactic acid-glycolic acid copolymer (65:35), and zinc oxide. The microcapsule powder was treated with CO<sub>2</sub> gas at 2 MPa, 15.degree. for 45 min for further removal of dichloromethane residue to < 32 ppm while maintaining the content of human growth hormone. The obtained microcapsule showed sustained-release of human growth hormone when its soln. was s.c. administered in rats.

IT 145040-37-5, Candesartan cilexetil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (manuf. of solid compn. contg. bioactive substance and  
 polymers comprising treatment with high-pressure gas)

IT 124-38-9, Carbon dioxide, uses

RL: NUU (Other use, unclassified); REM (Removal or disposal); PROC  
 (Process); USES (Uses)

(solvent removal; **manuf.** of solid compn. contg. bioactive  
 substance and polymers comprising treatment with high-pressure gas)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:332011 HCAPLUS

DOCUMENT NUMBER: 136:355482

TITLE: Compositions comprising a polypeptide and an active agent

INVENTOR(S): Piccariello, Thomas; Olon, Lawrence P.; Kirk, Randall J.

PATENT ASSIGNEE(S): New River Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034237	A1	20020502	WO 2001-US26142	20010822
W:				

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,  
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001086599 A5 20020506 AU 2001-86599 20010822

PRIORITY APPLN. INFO.:

US 2000-642820 A 20000822

WO 2001-US26142 W 20010822

AB Claimed are compns. comprising a polypeptide and an active agent covalently attached to the polypeptide and a method for delivery of an active agent to a patient by administering the compn. to the patient. The peptide is a homopolymer of a naturally occurring amino acid or a heteropolymer of two or more naturally occurring amino acids. In an example, (Glu)n-cephalexin was **prepd.** from Glu(OBut)NCA and cephalixin hydrochloride.

IT 554-13-2, Lithium Carbonate 145040-37-5,  
**Candesartan cilexetil**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compns. comprising a polypeptide and an active agent)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:293422 HCAPLUS

DOCUMENT NUMBER: 136:315007

TITLE: Taste-masked solid **preparations**

INVENTOR(S): Koike, Masahiko

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002030400	A1	20020418	WO 2001-JP8785	20011005
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
AU 2001094192	A5	20020422	AU 2001-94192	20011005
JP 2002179558	A2	20020626	JP 2001-309848	20011005

PRIORITY APPLN. INFO.:

JP 2000-313105 A 20001006

JP 2000-313106 A 20001006

WO 2001-JP8785 W 20011005

AB Disclosed are solid **prepns.** contg. (1) a basic drug component having an offensive taste; (2) sugars; (3) a polyanionic polymer; (4) a corrigent; and (5) CM-cellulose. In these **prepns.**, the offensive taste of the basic drug component can be fully masked and excellent characteristics such as quick disintegration, an appropriate **prepn.** strength and a high storage stability over a long time can

be achieved. Quickly disintegrating solid **prepn.** contg. a drug component, a sugar alc. and CM-cellulose have excellent characteristics such as quick disintegration, an appropriate **prepn.** strength and a high storage stability over a long time. Granules (granule A) were **prepd.** contg. pioglitazone.cntdot.HCl 350, Na CMC 150, D-mannitol 400, and hydroxypropyl cellulose LH-30 100 g. Sep. granules (granule B) were **prepd.** contg. D-mannitol 1891.6, CM-cellulose 360, and Na glutamate 36 g. Granule A 31.49, granule B 66.51, aspartame 1, and sucrose **fatty acid** esters 2 g were blended and compressed to give tablets (each weighing 450 mg).

IT 145040-37-5, Candesartan cilexetil

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(taste-masked solid **prepn.** contg. basic drugs)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:861473 HCAPLUS

DOCUMENT NUMBER: 134:32972

TITLE: Porous drug matrixes containing polymers and sugars and methods of their **manufacture**

INVENTOR(S): Straub, Julie; Bernstein, Howard; Chickering, Donald E., III; Khatak, Sarwat; Randall, Greg

PATENT ASSIGNEE(S): Acusphere, Inc., USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000072827	A2	20001207	WO 2000-US14578	20000525
WO 2000072827	A3	20010125		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6395300	B1	20020528	US 1999-433486	19991104
EP 1180020	A2	20020220	EP 2000-939365	20000525
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000010984	A	20020430	BR 2000-10984	20000525
JP 2003500438	T2	20030107	JP 2000-620939	20000525
US 2002041896	A1	20020411	US 2001-798824	20010302
NO 2001005753	A	20020128	NO 2001-5753	20011126
PRIORITY APPLN. INFO.:			US 1999-136323P	P 19990527
			US 1999-158659P	P 19991008
			US 1999-433486	A 19991104
			US 2000-186310P	P 20000302
			WO 2000-US14578	W 20000525

AB Drugs, esp. low aq. soly. drugs, are provided in a porous matrix form, preferably microparticles, which enhances dissoln. of the drug in aq.



media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aq. soly., in a volatile solvent to form a drug soln., (ii) combining at least one pore forming agent with the drug soln. to form an emulsion, suspension, or second solns., and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second soln. to yield the porous matrix of drug. The pore forming agent can be either a volatile liq. that is immiscible with the drug solvent or a volatile solid compd., preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aq. medium and administered parenterally, or processed using std. techniques into tablets or capsules for oral administration. Paclitaxel or docetaxel can be provided in a porous matrix form, which allows the drug to be formulated without solubilizing agents and administered as a bolus. For example, a nifedipine-loaded org. soln. was **prepd.** by dissolving 9.09 g of PEG 3350, 2.27 g of nifedipine, and 0.009 g of lecithin in 182 mL of methylene chloride. An aq. soln. was **prepd.** by dissolving 3.27 g of  $\text{NH}_4\text{HCO}_3$  and 0.91 g of PEG 3350 in 1.82 mL of water. The aq. and org. solns. were homogenized and resulting emulsion was spray dried. A suspension of the porous nifedipine drug matrix was **prepd.** in 5% dextrose soln. at a concn. of 2.5 mg/mL. A bolus injection of the suspension was tolerated when administered to dogs.

- IT 1066-33-7, Ammonium bicarbonate  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (**prepn.** of porous matrixes contg. hydrophilic polymers and sugars for enhancement of drug dissoln.)
- IT 145040-37-5, Candesartan cilexetil  
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (**prepn.** of porous matrixes contg. hydrophilic polymers and sugars for enhancement of drug dissoln.)
- IT 26266-57-9, Span 40  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (**prepn.** of porous matrixes contg. hydrophilic polymers and sugars for enhancement of drug dissoln.)

L25 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:592584 HCAPLUS

DOCUMENT NUMBER: 133:183020

TITLE: Percutaneous absorption **preparations** of compound having angiotensin II receptor antagonism

INVENTOR(S): Iga, Katsumi; Suzuki, Yasuyuki; Naka, Takehiko

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000048634	A1	20000824	WO 2000-JP926	20000218
W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR,				

LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK,  
 SL, TJ, TM, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG,  
 KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 JP 2000302695 A2 20001031 JP 2000-46819 20000218  
 EP 1153613 A1 20011114 EP 2000-904029 20000218  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: JP 1999-42396 A 19990219  
 WO 2000-JP926 W 20000218

AB Disclosed are percutaneous absorption **prepn.** which contain a  
 compd. having angiotensin II receptor antagonism and can permeate through  
 the skin at an appropriate speed over a long period of time. A  
 transdermal compn. contg. 1-(cyclohexyloxycarbonyloxy)ethyl-2-ethoxy-1-  
 [[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]benzimidazol-7-carboxylate (  
**Candesartan cilexetil**) as an active ingredient 7.5,  
 self-crosslinking acrylate copolymer (DuroTak 87-2979) 47.5,  
 monolauryldiethanolamide 5, isopropylmyristate 20, and propylene glycol  
 20 % was **prepd.**, and the percutaneous absorption of the active  
 ingredient in rats was examd.

IT 145040-37-5, Candesartancilexetil  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)

(transdermal compns. contg. angiotensin II receptor antagonists and  
**fatty acid** esters and/or higher alcs. and/or and/or  
 nonionic surfactants)

IT 110-27-0, Isopropyl **myristate** 110-36-1, Butyl  
**myristate** 110-40-7, Diethyl **sebacate**  
 142-91-6, Isopropyl **palmitate**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (transdermal compns. contg. angiotensin II receptor antagonists and  
**fatty acid** esters and/or higher alcs. and/or and/or  
 nonionic surfactants)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:779811 HCAPLUS

DOCUMENT NUMBER: 130:53943

TITLE: Production of aminobenzene compounds with improved  
 worker safety

INVENTOR(S): Hashimoto, Hideo; Hanaoka, Tadashi; Kato, Masayasu

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 881212	A1	19981202	EP 1998-109211	19980520
EP 881212	B1	20011031		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

US 6177587	B1	20010123	US 1998-80456	19980519
AT 207884	E	20011115	AT 1998-109211	19980520
ES 2162367	T3	20011216	ES 1998-109211	19980520
CA 2238427	AA	19981126	CA 1998-2238427	19980525
CN 1203223	A	19981230	CN 1998-101894	19980525
JP 11043474	A2	19990216	JP 1998-142653	19980525
JP 3003030	B2	20000124		

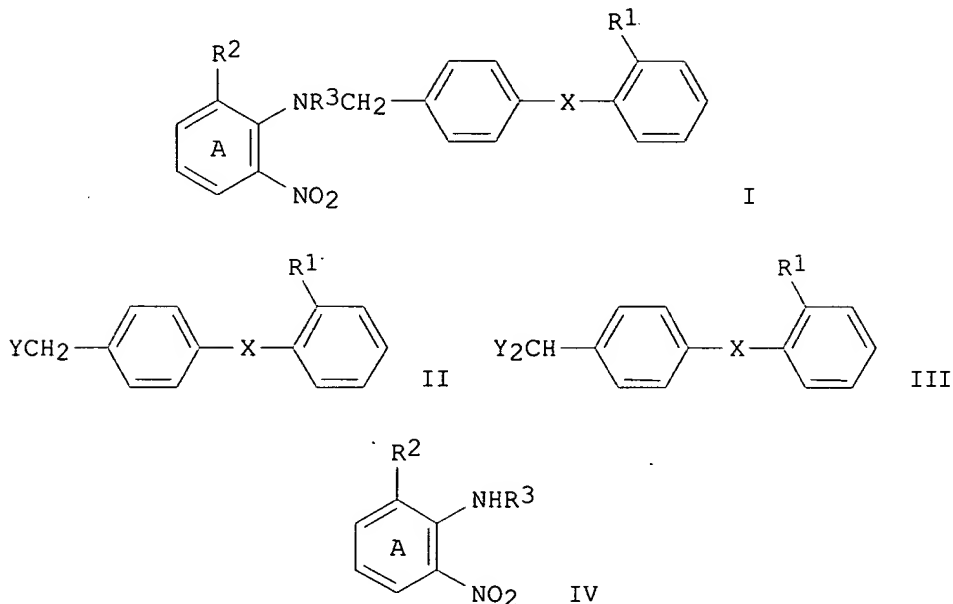
PRIORITY APPLN. INFO.:

JP 1997-134195 A 19970526

OTHER SOURCE(S):

MARPAT 130:53943

GI



AB Aminobenzene compds. I (R1, R2 are groups capable of forming an anion; R3 = acyl; X = bond, spacer of 1-2 atoms; A is a benzene ring which may have addnl. optional substituents) are **prepd.** by reacting a mixt. of a monohalogen compd. II (Y is a halogen) and dihalogen compd. III with an aminobenzene IV. The I are easily produced in in good yield in a completely airtight system, avoiding worker exposure to mutagenic II and salts thereof, and are useful as synthetic intermediates for the prodn. of medicines.

IT 78-09-1P, Tetraethyl orthocarbonate

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(**prepn.** and reaction of; in prodn. of aminobenzene compds. with improved worker safety)

IT 145040-37-5P

RL: IMF (Industrial manufacture); PREP (Preparation)

(prodn. of aminobenzene compds. with improved worker safety)

IT 99464-83-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of; in prodn. of aminobenzene compds. with improved worker safety)

REFERENCE COUNT:

3 .

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:128924 HCAPLUS

DOCUMENT NUMBER: 116:128924

TITLE: Preparation of benzimidazole derivatives as  
angiotensin II antagonists

INVENTOR(S): Naka, Takehiko; Nishikawa, Kohei; Kato, Takeshi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Eur. Pat. Appl., 70. pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

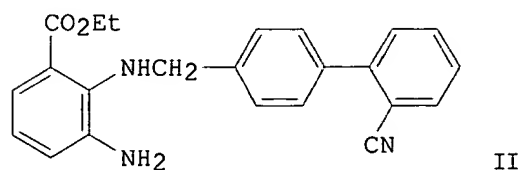
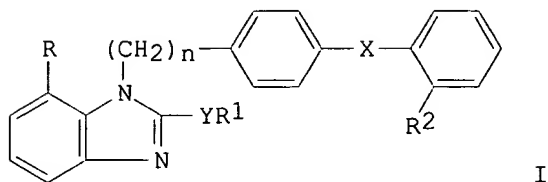
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 459136	A1	19911204	EP 1991-106330	19910419
EP 459136	B1	19961227		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
IL 97882	A1	19961114	IL 1991-97882	19910416
US 5196444	A	19930323	US 1991-687238	19910418
EP 720982	A1	19960710	EP 1995-118796	19910419
EP 720982	B1	20021113		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 146779	E	19970115	AT 1991-106330	19910419
ES 2095266	T3	19970216	ES 1991-106330	19910419
AT 227709	E	20021115	AT 1995-118796	19910419
ES 2181742	T3	20030301	ES 1995-118796	19910419
CA 2040955	AA	19911028	CA 1991-2040955	19910422
CA 2040955	C	19980203		
NO 9101586	A	19911028	NO 1991-1586	19910422
ZA 9102983	A	19920129	ZA 1991-2983	19910422
JP 04364171	A2	19921216	JP 1991-189614	19910422
JP 2514282	B2	19960710		
CA 2204290	C	20011218	CA 1991-2204290	19910422
CN 1055927	A	19911106	CN 1991-102569	19910423
CN 1048486	B	20000119		
AU 9175331	A1	19911121	AU 1991-75331	19910423
AU 647469	B2	19940324		
HU 57736	A2	19911230	HU 1991-1347	19910423
HU 213266	B	19970428		
RU 2052455	C1	19960120	RU 1991-4895495	19910423
PL 168958	B1	19960531	PL 1991-292174	19911025
PL 169116	B1	19960628	PL 1991-308620	19911025
PL 169451	B1	19960731	PL 1991-308621	19911025
PL 170324	B1	19961129	PL 1991-308619	19911025
CZ 289405	B6	20020116	CZ 1991-3239	19911025
SK 282473	B6	20020205	SK 1991-3239	19911025
LV 10258	B	19950420	LV 1992-567	19921230
US 5328919	A	19940712	US 1993-997703	19930105
LT 3246	B	19950425	LT 1993-438	19930319
US 5401764	A	19950328	US 1993-58739	19930510
US 5705517	A	19980106	US 1993-131667	19931005
JP 08099960	A2	19960416	JP 1995-220844	19950829
JP 2853611	B2	19990203		
CN 1147515	A	19970416	CN 1996-107765	19960523
CN 1058966	B	20001129		
US 5703110	A	19971230	US 1996-715100	19960917

NO 9700195	A	19970116	NO 1997-195	19970116
US 5962491	A	19991005	US 1997-924919	19970908
FI 9802761	A	19981221	FI 1998-2761	19981221
US 6004989	A	19991221	US 1999-280094	19990329
US 6232334	B1	20010515	US 1999-376494	19990818
US 2001047020	A1	20011129	US 2001-817231	20010327
FI 2001002172	A	20011109	FI 2001-2172	20011109
US 2002151723	A1	20021017	US 2002-46189	20020116

PRIORITY APPLN. INFO.:

JP 1990-113148	A	19900427
JP 1990-141942	A	19900530
JP 1990-208662	A	19900806
JP 1990-264579	A	19901001
JP 1990-413679	A	19901224
US 1991-687238	A3	19910418
EP 1991-106330	A3	19910419
CA 1991-2040955	A3	19910422
FI 1991-1936	A3	19910422
JP 1991-189614	A	19910422
US 1993-997703	A3	19930105
US 1993-58739	A3	19930510
US 1993-131667	A3	19931005
US 1996-715100	A3	19960917
US 1997-924919	A3	19970907
US 1999-280094	A3	19990329
US 1999-376494	A3	19990818
US 2001-817231	A3	20010327

OTHER SOURCE(S): MARPAT 116:128924  
GI



AB Benzimidazole derivs. [I; R = (esterified) CO<sub>2</sub>H, CONH<sub>2</sub>, a group capable of forming an anion; R<sub>1</sub> = H, (substituted) hydrocarbyl; R<sub>2</sub> = a group capable of forming an anion; X = bond, spacer of 1 or 2 atoms; Y = O, S(O)<sub>m</sub> (m = 0, 1, 2), NR<sub>4</sub> = H, (substituted) alkyl; n = 1, 2], useful in treating hypertension, heart diseases, etc., are **prepd**. HOAc was added to a soln. of ester II in C(OMe)<sub>4</sub> with stirring at 80.degree. to give 90% I (R = CO<sub>2</sub>Et, YR<sub>1</sub> = OMe, R<sub>2</sub> = cyano, X = bond, n = 1). Also **prepd**. were 58 addnl. I, which showed up to 96% inhibition of angiotensin II binding at 10<sup>-6</sup>M in a radioreceptor assay.

IT 597-72-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyclocondensation of, with phenylenediamine, in **prepn.** of

angiotensin II antagonist)

IT 139481-74-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as angiotensin II antagonist)

=> fil reg

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STRUCTURE FILE UPDATES: 8 APR 2003 HIGHEST RN 502421-05-8

DICTIONARY FILE UPDATES: 8 APR 2003 HIGHEST RN 502421-05-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d ide can l12 1

L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN 145040-37-5 REGISTRY

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 1-[[[(cyclohexyloxy)carbonyl]oxy]ethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-, 1-[[[(cyclohexyloxy)carbonyl]oxy]ethyl ester, (.-.-.)-

OTHER NAMES:

CN (.-.-.)-1-Hydroxyethyl 2-ethoxy-1-[p-(o-1H-tetrazol-5-ylphenyl)]-7-benzimidazolecarboxylate, cyclohexyl carbonate (ester)

CN Atacand

CN Candesartan cilexetil

CN TCV 116

CN TCY 116

FS 3D CONCORD

DR 139481-74-6, 198077-85-9

MF C33 H34 N6 O6

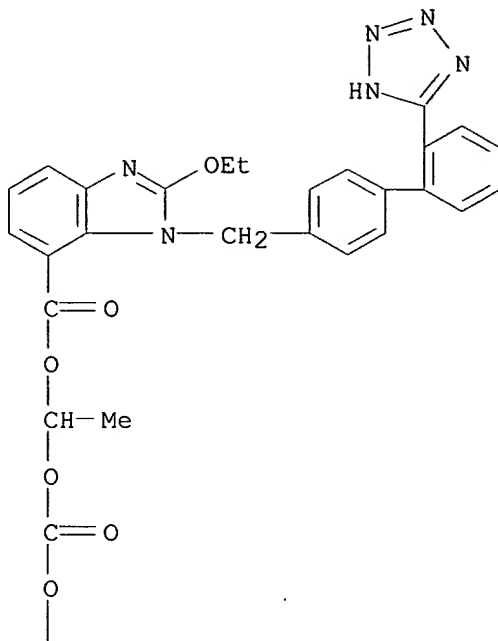
SR CA

LC STN Files: ADISINSIGHT, ADISNEWS, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK\*, PHAR, PROMT, RTECS\*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

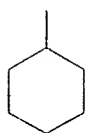
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(\*File contains numerically searchable property data)  
Other Sources: WHO

PAGE 1-A



PAGE 2-A



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

339 REFERENCES IN FILE CA (1962 TO DATE)  
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
340 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 138:214720  
REFERENCE 2: 138:210444  
REFERENCE 3: 138:163223  
REFERENCE 4: 138:158871  
REFERENCE 5: 138:147508

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George 09/7913,516

Page 15

REFERENCE 6: 138:147482

REFERENCE 7: 138:147418

REFERENCE 8: 138:66247

REFERENCE 9: 138:61310

REFERENCE 10: 138:49879

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